

EXHIBIT A

CONTROL ELEMENT FOR A NUCLEAR REACTOR

CROSS REFERENCE TO RELATED APPLICATIONS

This is an Continuation-in-Part application of Serial No. 09/265,738 filed on March 10, 1999. Applicant claims priority under 35 U.S.C. §119 of German Application No. 198 10 433.2 filed March 11, 1998.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a control element for a nuclear reactor, with an absorber and with at least one inner absorber enclosure and one outer absorber enclosure for receiving the absorber.

2. The Prior Art

The term "control element" generally denotes control assemblies for pressurized water reactors and control rods for boiling water reactors. These control elements are required for controlling the reactor power and also have to be capable of safely shutting down the reactor under any operating condition. The control elements are inserted in or between the fuel elements or nuclear fuel rods in order to absorb neutrons and to control in this way the chain reaction.

In boiling water reactors, the control elements are raised into the bottom of the fuel elements, for example in large power nuclear reactors just to such an extent that of the neutrons liberated in a nuclear fission,